

## 10 dB Fixed Attenuator, 4.3-10 Male (Plug) to 4.3-10 Female (Jack) Up to 6 GHz Rated to 2 Watts, 1.3:1 VSWR

Fairview Microwave carries a broad selection of fixed attenuators with a wide range of attenuation levels, frequency ranges, and power dissipation ranges. Also known as RF pads, RF microwave attenuators lower the amplitude of a signal (or attenuate) a known amount. These attenuator pads can be used in a wide variety of applications including reducing a signal level to protect measurement equipment or other circuitry, extending the range of power meters and amplifiers, and impedance matching circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to a range that is optimal.

Few RF components are as commonly used as fixed coaxial attenuators, and Fairview Microwave carries one of the largest in-stock varieties and ships them same day. The FMAT7451-10 is a 10 dB Fixed Attenuator that operates from DC to 6 GHz and is rated to 2 Watts. The versatile coaxial package uses 4.3-10 male to 4.3-10 female connectors and is also RoHS compliant.

### Electrical Specifications

| Description                                  | Min | Typ | Max   | Units |
|--|-----|-----|-------|-------|
| Frequency Range                              | DC  |     | 6     | GHz   |
| Impedance                                    |     | 50  |       | Ohms  |
| Nominal Attenuation                          |     | 10  |       | dB    |
| Attenuation Accuracy                         |     |     | ±0.5  | dB    |
| VSWR   |     |     | 1.3:1 |       |
| Input Power, CW                              |     |     | 2     | Watts |
| Input Power, Peak<br>5µs PW, 0.4% duty cycle |     |     | 500   | Watts |

### Mechanical Specifications

|                           |                     |
|---------------------------|---------------------|
| <b>Size</b>               |                     |
| Length                    | 2.874 in [73 mm]    |
| Width/Diameter            | 0.709 in [18.01 mm] |
| Height                    | 0.709 in [18.01 mm] |
| Weight                    | 0.143 lbs [64.86 g] |
| Body Material and Plating | Brass, Nickel       |

### Configuration

|               |               |
|---------------|---------------|
| Design        | Fixed         |
| Package Style | Connectorized |

### Connectors

| Description                | Connector 1   | Connector 2            |
|----------------------------|---------------|------------------------|
| Type                       | 4.3-10 Male   | 4.3-10 Female          |
| Contact Material & Plating | Brass, Gold   | Beryllium Copper, Gold |
| Body Material & Plating    | Brass, Nickel | Brass, Nickel          |



### Features:

- DC to 6 GHz Frequency Range
- 4.3-10 Connectorized Design
- Attenuation 10 dB ±0.5 dB
- Max Power 2 Watts (CW)
- Typical VSWR of 1.3:1

### Applications:

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems

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[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Environmental Specifications**

**Temperature**

Operating Range -55 to +125 deg C  
Storage Range -55 to +125 deg C

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

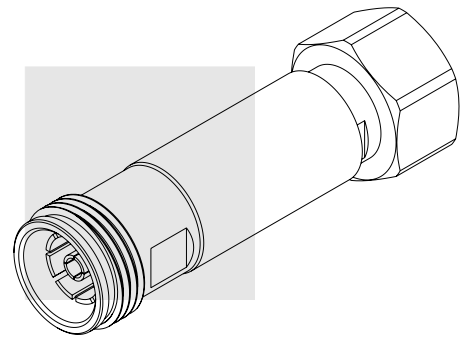
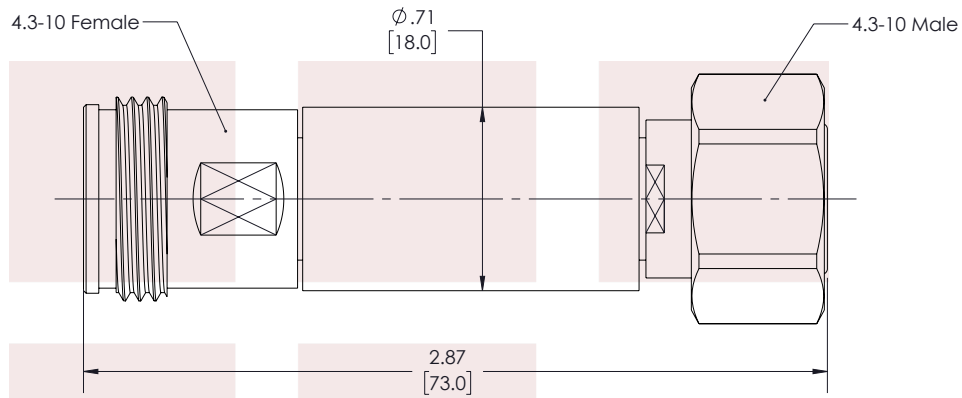
10 dB Fixed Attenuator, 4.3-10 Male (Plug) to 4.3-10 Female (Jack) Up to 6 GHz Rated to 2 Watts, 1.3:1 VSWR from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [10 dB Fixed Attenuator, 4.3-10 Male \(Plug\) to 4.3-10 Female \(Jack\) Up to 6 GHz Rated to 2 Watts, 1.3:1 VSWR FMAT7451-10](#)

URL:

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 12/28/2022 | SPONG    |



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TITLE

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

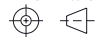
TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ± 1/32  
.XX = ±.02 [.51] ANGLES ± 1°  
.XXX = ±.005 [.13]

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0  
12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

|           |                    |                       |                         |          |
|-----------|--------------------|-----------------------|-------------------------|----------|
| SIZE<br>A | CAGE CODE<br>3FKR5 | DRAWN BY<br>PSRINIVAS | ITEM NO.<br>FMAT7451-10 | REV<br>A |
|-----------|--------------------|-----------------------|-------------------------|----------|

T-Rev.D